Claims

1. In combination with a shaft located along an axis of rotation, a first member disposed in concentric relationship to said shaft and a pair of bearings mounted on the shaft, and each bearing including an inner race engaging and being secured to the shaft and an outer race engaging and being secured to said first member, a bearing failure indicator, comprising: a contact surface disposed at a fixed radius relative to said axis of rotation; a second member mounted on said shaft and having at least one projection disposed at a predetermined clearance distance from said contact surface when said bearing is unworn, whereby, when said bearing undergoes a predetermined amount of wear one of said shaft and first member will rotate non-concentrically relative to said axis such that said projection will come into contact with said contact surface and thereby generate an audible sound which alerts an operator of an impending bearing failure.

2. The combination, as defined in claim 1, wherein said shaft is mounted for rotation about said axis; a drive being coupled to said shaft and including a power source, and a slip coupling located between a power source and said shaft; said slip coupling normally establishing a drive connection between said power source and said shaft but being responsive to an increase in torque caused by said at least one projection engaging said contact surface so as to slip and disconnect the transfer of torque to said shaft, thereby requiring an operator to replace the bearings so as to avoid a bearing failure.

3. The combination, as defined in claim 1, wherein said at least one projection is a tooth having an arcuate surface facing radially outwardly from said axis; and said contact surface being arcuate and facing radially inwardly toward said axis; and said clearance gap being established between said arcuate surface facing radially outwardly and said contact surface facing radially inwardly when said tooth and contact surface are in radial alignment with each other.

4. The combination, as defined in claim 1 wherein said first member is a bearing housing having at least one lug joined to an axially facing surface thereof; said at least one lug having a radially inwardly facing surface defining said contact surface; said second member being a disk; and said projection being a radially

outwardly extending tooth formed on said disk and defining a second contact surface disposed for establishing said clearance gap when passing adjacent said contact surface of said at least one lug.

5. The combination, as defined in claim 1, wherein said second member is a disk; said at least one projection being a protrusion extending radially from a periphery of said disk; and said contact surface being disposed arcuately about said axis in radial alignment with said at least one protrusion.

6. The combination, as defined in claim 1, wherein said first member includes a cylindrical tube having an interior surface defining said contact surface; and a secondary bearing being defined by a cylindrical plastic member and being mounted on said shaft, with an outer periphery of said plastic member being in sliding engagement with said contact surface; whereby a radial amount of material of said secondary bearing equal to said radial gap will have to wear away before said protrusion will be able to come into contact with said contact surface, thus prolonging the amount of time that an operator can wait before replacing a worn bearing.

7. The combination, as defined in claim 1, wherein said shaft is fixed; a cylindrical tube being arranged in concentric relationship to said axis when said bearings are unworn; said first member being a bearing housing fixed within said cylindrical tube; and said bearing housing having at least one lug fixed to an axially facing surface thereof and defining said contact surface.